

## Capital Facilities Element

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With continued population growth in the Subarea and the plan for economic development, it is important to have a public facilities scheme in place to serve new households and businesses. This section will identify the existing capital facilities in place and will identify the need for new public facilities necessary to serve the projected growth in the South Lewis County Subarea.

### Public Utilities Profile

The Growth Management Act (GMA) requires that infrastructure, including public utilities, be available when the impacts of urban development occur or within a specified time thereafter. Public utility services include potable water, sanitary sewer, surface/stormwater management, and solid waste. Power, natural gas, and telecommunications services are provided by private companies and regulated by state and local governments. Most of these utilities require significant public investment, and coordination between utilities and land use is important.

Concurrent with the preparation of the South Lewis County Subarea Plan, the County and the Cities of Toledo, Winlock, and Vader have engaged in a process to determine whether a regional organization should be established to manage the provision of water and sanitary sewer services in the South County urban areas. In this process, current and projected water and sewer service demands have been analyzed, and multiple alternatives for the provision of water and sewer services have been considered, including the feasibility of forming a regional utility. The elected officials of the jurisdictions have met regularly to discuss their respective objectives and identify further planning and analysis that will be necessary prior to creation of a regional governance structure. There is consensus amongst the governing bodies that a full service regional water and sewer entity, designed under the state Interlocal Cooperation Act, would best serve current and projected water and sewer service demands in the South County Subarea. However, this very complex undertaking which involves: determining the value of current utility assets and liabilities owned by the cities; defining the capital investment requirements for future utility system improvements (including systems to serve the new economic development UGAs proposed in the Subarea Plan); and establishing financial systems and rate structures necessary to cover long-term capital and operating costs for utilities. This process will take time.

The following summarizes the current status of water and sewer services provided by the cities. If the regional alternative is implemented, the regional service provider would prepare and approve facility plans to extend water and sewer services to the new economic development UGAs proposed by the Subarea Plan. The regional facility plans would blend the cities' existing facilities plans and accommodate specific master plan requirements for approval of development applications in the economic development UGAs. If the regional alternative is not implemented, or is delayed, then development within new UGAs will either require on-site self-contained systems or city-provided services through individual agreements.

### Water

The Subarea contains three major water systems. The water systems for the Cities of Toledo and Vader serve the entire city limits and adjacent unincorporated UGAs. The water system for the City of Winlock serves the city limits and a portion of the unincorporated UGA, and is planned to serve the large UGA that has been extended to I-5. In addition to the Cities' water systems, there

are a number of systems that serve residential and commercial developments in rural areas in the South County Subarea. The County and Cities are participants in the Grays-Elochoman and Cowlitz Watershed Management Plan for the Water Resource Inventory Area 26 (WRIA 26) for the Cowlitz Basin. This plan recognizes the lower Cowlitz River as a significant source of water that could serve future demand for the Subarea. Under the Watershed Management Act, the Department of Ecology has developed draft rules incorporating recommendations from the Watershed Management Plan. These include a reservation of water for future allocation in the lower Cowlitz Basin. The County prepared an analysis of future water supply demands for the Subarea, in conjunction with the Watershed Management Plan and Department of Ecology's rule-making process, for the purpose of developing a regional water supply and allocation scheme to meet the combined needs for planning area while preserving the Cowlitz Basin's in-stream flow requirements.

### **Toledo**

According to the City's 2010 Draft Water System Plan (WSP) update, the system has nearly seven miles of water mains, two wells, and a 250,000-gallon reservoir. In 2010, the City was serving 368 connections and was approved for 420 connections by the Washington Department of Health in February 2010. The City owns 144-acre feet of water rights per year, equating to 128,000 gallons per day (GPD) and has WRIA reservations for another 304,000 GPD. Average consumption is approximately 74,000 GPD. The City anticipates an average daily demand of 157,000 GPD in 2030, leaving a surplus of approximately 275,000 GPD. The City has plans for \$3.5 million worth of improvements, including a third well, a new reservoir, and various repairs, upgrades, and replacements.

### **Vader**

The City of Vader provides water to the area residents. Recently, the City took over servicing the Enchanted Valley water system. According to the Comprehensive Plan and the 2010 amended Water System Plan, there are 344 connections, including 99 in Enchanted Valley, in the City's water system. The City's water source is the Cowlitz River, providing a maximum flow of 224 gallons per minute. The system contains 5.5 miles of pipes and has an average daily demand of 95,000 GPD or 106 acre feet per year. According to the State Department of Health, Vader loses 40% of its treated water, well above the State's 10% standard. As a result, the water system is operating at near-maximum capacity. The City will have to either analyze the system to repair leaks and replace water meters or build another water storage tank. The cost of these options ranges from \$10,000 to \$250,000. The capital improvement program for Vader plans \$1.9 million of projects through 2025. Recent problems with Vader's water distribution system will be addressed in 2010-2011 with state funding. The County, City, and State Department of Health (DOH) are working on a legal action to put the system into receivership and to name the County as receiver to assume control and become the responsible entity for repairs, maintenance, and operations. The County has been awarded approximately \$950,000 in grants and \$350,000 in loan from the Community Development Block Grant (CDBG) and Drinking Water State Revolving Fund (DWSRF) to replace distribution lines and water meters. With Vader's water rights of 162,000 GPD and if systems repairs can cut distribution losses to 20%, the City could potentially have water supplies of 178,000 GPD, 62,000 GPD over the projected 2030 demand of 116,000 GPD.

## **Winlock**

According to Winlock's 2008 WSP, the system has four wells, three reservoirs totaling 1.1 million gallons, and 482 acre feet per year of water rights. The City expects high residential and commercial growth, which would increase the average daily demand from 375,000 GPD to 967,000 GPD in 2030. Approximately \$14.1 million worth of capital improvement projects have been planned through 2013. Water availability, based on current water rights, WRIA reservations, potential conservation and reclamation and reuse, comes to about 727,000 GPD, 240,000 GPD short of projected demand.

## **County**

Future water needs projections are recognized as estimates based on expected changes in population, land use, and economic development. The Grays-Elochoman Watershed Management Plan and proposed WRIA reservation sets aside 6.6 CFS, or approximately 4,266,000 GPD, to support future growth and economic development in the lower Cowlitz Basin. Determining the amount of water needed for future use in unit terms for various economic purposes must be expressed as low and high range potentials. For the proposed new economic development UGAs in the South County Subarea, if the County allocates half of its reservation, 2,133,000 GPD, to the Subarea, availability could fall short by 742,000 GPD if all the proposed UGAs had developments with high water demand at full build out. In a scenario having developments with lower water demand, the proposed UGAs could have adequate supply. These ranges will also be affected by integrating conservation goals and water reclamation or reuse strategies.

## **Wastewater**

There are three sewer systems in the Subarea located in each of the three Cities. The Toledo sewage treatment plant is located in the south of the City next to the Cowlitz River. The Vader sewage treatment plant is adjacent to the Olequa Creek in the south of the City. The Winlock sewage treatment plant is located in the south of the City next to the Olequa Creek.

## **Toledo**

The 2005 update of the Toledo Comprehensive Plan describes the conditions of the Toledo sewer system. The sewer system contains approximately 23,000 linear feet of pipe and a three-pond sewage treatment plant that discharges treated effluent into the Cowlitz River. The treatment plant has a capacity to handle up to 400,000 GPD and serve a population of up to 900 people. At this time, the National Pollutant Discharge Elimination System (NPDES) permit only allows 135,000 GPD, perhaps due to groundwater infiltration into the collection system. With a new NPDES permit allowing full use of the sewage treatment plant, the system can accommodate the 2030 population forecast of 880. The City has made progress in addressing the infiltration problem bringing it in line with Ecology's standards, but other problems have been found due to the reduced flow and will have to be addressed in order for the system to expand. The City's 2008 General Sewer and Wastewater Facility Plan identifies wastewater system improvements and a plan to finance them. This includes constructing a new \$12 million oxidation treatment facility as well as the regional utility option.

## **Vader**

According to the 2005 Capital Facilities Element of the Vader Comprehensive Plan, the City's sewer system has approximately 19,800 linear feet of sewer mains and one lift station. In

2000/2001, 222 sewer connections served a population of 605. The 2005 Comprehensive Plan identified problems such as raw sewage overflows, inability to measure flows, damaged lagoon liner, lagoon erosion, and blocked and damaged pipes. In February 2008, the State informed the City that their wastewater treatment facility is not functioning effectively and needed to be replaced. In order to accommodate growth, the City completed an update to its sewer plan in 2009 which included alternatives to construct a new \$8-10 million treatment facility or construct lines and pumps to send effluent (intertie) to the Winlock treatment plant for \$8-10 million dollars. The preferred alternative in the Plan is for the City to construct its own treatment plant. However, the City is considering the Winlock option as a part of the regional utility option.

### **Winlock**

The Winlock 2005 Capital Facilities Plan states the current conditions and the future needs for wastewater systems in the City. There are five sewer basins in Winlock with 50,830 linear feet of gravity flow pipe. To accommodate new growth in the adjacent unincorporated UGA, the collection system needs to be expanded eastward to I-5. The original wastewater treatment plant (WWTP) was built in the 1950s and was upgraded in the late 1970s. The WWTP had flow capacity of 1.2 million GPD for primary and secondary treatment and 3.0 million GPD for only primary treatment. In 2007, Winlock received \$6.9 million from the Washington DOE Water Pollution Control Revolving Fund to construct a new wastewater treatment plant.

The new WWTP increases capacity and meets future growth and water quality standards. The new WWTP can handle 2 million gallons a day (MGD) peak flow with the ability to increase capacity to 4 MGD in the future. The new WWTP will meet the needs of existing customers and areas of the unincorporated UGA east of the city through 2028. Expansion will be scheduled based on actual development. Winlock's new WWTP is capable of more than doubling its capacity, which might make it possible to provide service to new economic development UGAs.

### **Surface Water**

Information on surface/stormwater conveyance systems in the South County Subarea is not readily available. The City of Vader is the only community that published data on its stormwater system in the Comprehensive Plan. According to the 2005 Vader Comprehensive Plan, there are 6,250 linear feet of stormwater lines, and the system is adequate according to the existing level of service standards.

The Cities and Lewis County regulate stormwater management at the development project level through respective permitting procedures using the guidance provided in the Department of Ecology's Stormwater Management Manual.

### **Solid Waste**

The 2008 Solid and Hazardous Waste Management Plan (SHWMP) addresses solid waste and moderate risk waste management throughout Lewis County as a joint county and cities plan. The SHWMP documents current waste management programs, evaluates future waste management needs, and outlines a 20-year program for managing solid waste in Lewis County.

Solid waste collection in unincorporated Lewis County is provided exclusively by private companies. The Cities of Toledo and Winlock have opted into the County's certified haulers, and Vader contracts solid waste collections with a private refuse company. The hauler delivers the waste to the two transfer stations located in Centralia and Morton. There are two drop boxes in the Subarea. The Winlock Drop Box is located on Winlock-Vader Road halfway between Winlock

and Vader. The Toledo Drop Box is located on Toledo-Vader Road, 1.5 mile northwest of the City. Lewis County does not operate a landfill and has no plans to do so. Waste is sent from the two transfer stations to the Roosevelt Landfill located in eastern Washington near the town of Roosevelt in Klickitat County.

## Power

Lewis County Public Utility District (PUD) serves all portions of the South County Subarea, including the three cities. Lewis County PUD currently serves over 30,000 customers with approximately 25,000 residential, 4,300 commercial, 625 public, and 80 industrial customers countywide. The most recent winter peak load for the PUD was 212 megawatts and the total energy load for 2007 was 980,870 megawatt-hours. The PUD currently obtains all of its power supply from the Bonneville Power Administration (BPA) through 2012. In addition, the PUD is required to meet a portion of its power supply in 2012 from qualifying renewable resources. As a result, the PUD is evaluating capital improvement alternatives to meet future power supply requirements. The PUD's capital improvement program generally amounts to approximately \$5 million of investment annually.

## Natural Gas

Puget Sound Energy (PSE) provides natural gas service to more than 737,000 customers from Snohomish to Lewis Counties. PSE currently has more than 4,600 residential, commercial, and industrial customers in Lewis County. Utilizing the current distribution system, PSE has the capacity to supply approximately 8,500 customers in the County. PSE serves some of the urban areas in the Subarea including Toledo and Winlock (but not Vader). The existing system can be expanded to meet any future needs beyond the existing capacity to supply.

## Telecommunications

Several local and national telecommunication companies provide service to Lewis County residents. These providers are regulated by federal, state, and local jurisdictions. The County coordinates provisions of these services through the development permitting process.

### Toledo

Toledo Telephone provides telephone, high-speed internet (DSL) and DIRECTV services to the Toledo area. Toledo Telephone provides wireline service to over 2000 customers. Toledo currently has gigabit ethernet connections directly to Seattle, Washington and Portland, Oregon over their own fiber facilities. Toledo Telephone currently provides DS-1 facilities to AT&T Wireless, Verizon Wireless, T-Mobile, Sprint PCS, and Nextel.

### Vader

CenturyLink (formerly CenturyTel) provides telephone service and DSL to the Vader area. CenturyLink provides DS-1 facilities to Verizon Wireless and Sprint PCS.

### Winlock

According to the 2005 Winlock Comprehensive Plan update, Qwest Communications (formerly U.S. West, and recently purchased by CenturyLink) and CenturyLink provide telephone service and DSL to the Winlock area, Comcast (formerly TCI Cable) provides cable service within the city of Winlock. Since 2006, Toledo Telenet (an Affiliate of Toledo Telephone) offers broadband



internet access within the City of Winlock via fiber optic cable. Qwest provides DS-1 facilities to Nextel.

## Public Utilities Demand Forecast

As the South County Subarea's population and employment grows, there will be a need for more utility service in the Subarea. Most of this growth is expected to occur in urban areas and will require urban services. Growth within the economic development UGAs may be served through several combinations of public and private improvements depending on the timing, scale, and intensity of planned projects. Consequently, coordination between the providers and users will be critical to maintain concurrency between development proposals and utilities.

Extrapolating from the South Lewis County Regional Market Analysis (Hovee), estimated 80 to 85 net acres could be developed for retail, commercial and tourism uses between 2010 and 2015. This could result in approximately 500,000 square feet of building area. Using estimates from the South Lewis County Water Analysis and Demand Forecast, this amount of development of these use-types would generate a demand for water of approximately 400,000 to 450,000 gallons per day. Assuming, conservatively, that 90% of the water used would be disposed of in the wastewater system, the demand for wastewater capacity would be in the range of 360,000 to 405,000 gallons per day.

Using the same sources to analyze the potential growth in manufacturing/distribution uses between 2010 and 2015, an estimated 75 to 100 net acres of new development would result in a demand of 200,000 to 250,000 gallons per day for water and 160,000 to 200,000 gallons per day of wastewater.

Although the 2010 to 2015 time window is used in these estimates, the actual time period that this development would occur should be considered the approximate six-year period after the Subarea Plan and implementing measures are adopted.

There is a broad range of capacity demand for both water and sewer for the different types of uses that could be developed in the economic development UGAs. Therefore, the above estimates are conservative, and actual demand may be less than stated.

## Public Services Profile

While public utilities are mostly "in the ground infrastructure," public services are general services provided by public employees. The public services provided in the South County Subarea include schools, libraries, parks and recreation, public safety, and emergency services.

### Schools

There are six school districts that serve students the South County Subarea. Three school districts have schools in the Subarea (Toledo #237, Winlock #232, and Evaline #36). The three school districts whose facilities are outside of the Subarea include Castle Rock #401C, Napavine #14, and Chehalis #302. (See Figure 6.1)

#### **Toledo School District #237**

The Toledo School District has one elementary school, one middle school, and one high school. In 2009, the District served 952 students in grades K-12. The 2009 – 2015 Capital Facilities Plan forecasts that the district will serve 991 students by 2015 and approximately 1,200 students by 2025.

The middle school and the elementary school were remodeled in 1996. The high school was built in the 1970s, and two classrooms were added in 2008. Other district facilities include the district office, a bus barn, and three athletic facilities.

The Toledo School District has served many non-resident students. Approximately 16% of enrolled students reside in surrounding districts. There is a district policy in place with an enrollment cap on the number of these students.

The most significant issues facing the District in terms of facilities are:

- Modernizing the present high school and addressing the needs to support the Advance Placement program, math and science curriculum, and adding restrooms at the football facility.
- Modernizing the middle school, adding capacity for growth and improving the woodshop.
- Adding classrooms to the elementary school and high school for growth; and adding space for special education, pre-school, and an outside covered play area.
- Adding safety and security improvements, including lighting and fire alarm systems.
- Expansion and improvement of the office space in the district office

### **Winlock School District #232**

The Winlock School District has served approximately 732 elementary, middle, and high school students in two facilities. The middle school and high school are co-located. Portable classrooms are also in use at each location. The district owns and operates two support buildings; the administrative offices and the transportation building.

The District's current capacity, its educational programs, standard of service and enrollment forecast is used to determine its facility needs. According to the District's 2009 – 2015 Capital Facilities Plan, the current enrollment is 732 students (October 2008 headcount); current capacity is 781 students; and the projected enrollment for 2015 is 953 students. The District has adequate capacity for existing enrollment, but will require additional capacity for 172 students by 2015.

To attain the needed increased capacity for 172 students, the District intends to acquire property and construct an intermediate school for 240 students in 4<sup>th</sup> through 6<sup>th</sup> grades. Additionally, the District plans to improve and reconfigure the existing middle school for additional high school capacity and to evaluate its programs and grade configurations. Lastly, the District will look at making improvements to the high school athletic facilities.

In addition to forecasting enrollment for the year 2015, the District has used county population and housing data to make a long range forecast to the year 2025. Using a medium growth scenario, the estimated student population will be approximately 1,300 by 2025, or an increase of 600 students.

### **Evaline School District #36**

The Evaline School District consists of only one elementary school located three miles north of Winlock. This year, Evaline Elementary has served an average of 38 fulltime equivalent students. The Evaline School District does not have a Capital Facilities Plan.

### **Castle Rock School District #401C**

The Vader Elementary School closed in 2007. Now the Vader area is served by the Castle Rock School District in Cowlitz County. Castle Rock is located 10 miles south of Vader. The Castle Rock School District serves more than 1,300 students in three schools: an elementary school, a middle school, and a high school.

### **Napavine School District #14**

The northern portion of the Subarea is located in the Napavine School District. The School District has an elementary school, middle school, and high school that serve about 760 K-12 students. All of the schools are located in the City of Napavine approximately one mile north of the northern edge of the Subarea.

### **Chehalis School District #302**

Approximately 80 acres in the northeast corner of the Subarea is located in the Chehalis School District. The district currently serves approximately 2,700 students at three elementary schools, one middle school, and one high school. The District has a capacity of 3,889 students, and the only capital project being considered is the possible replacement of the 80 year old R.E. Bennett elementary school.

## **Library**

There is one library in the Subarea, which is located in downtown Winlock. The Winlock Library is part of the Timberland Regional Library (TRL) system. The TRL has 27 libraries that serve a five-county area (Grays Harbor, Lewis, Mason, Pacific, and Thurston Counties) with a population of approximately 500,000. The TRL has a 1.7 million item collection with an annual circulation of 4.8 million, an \$18 million budget, and 314,000 cardholders. There are five branches in Lewis County including the Winlock branch.

The Winlock branch joined the TRL in 1969, and it is located in 2,800 square feet of the Winlock City Hall. The library houses approximately 25,000 items and circulated nearly 111,000 items in 2008. The Winlock branch is the home library of almost 6,000 cardholders, and the branch, with its four employees, served over 61,000 patrons in 2008. The library is free for rural Lewis County and Winlock residents because the County and City have contracted with the TRL system. Vader, Toledo, Napavine, and Cowlitz County residents must purchase a card for \$78 a year per household. The library would like to expand, but there are no funds available to do so. The Friends of Winlock Library have pledged money to help fund an expansion feasibility study.

Vader has opened a community library across from the Post Office. The library has donated books, and its \$500 a month budget will come from the City, fundraisers, and individual donations. The library is staffed by volunteers in donated space.

## **Parks and Recreation**

There are eight parks in the Subarea, including State, County, and local parks. There are three State Parks in the Subarea. All of the parks are located on Jackson Highway near US 12 in the



rural portion of the Subarea. The State Parks include Lewis and Clark State Park (a large, approximately 600-acre park with an old growth forest), Jackson State Park (a small 5-acre park), and Jackson Court House State Park (a historic 1845 log cabin on a one-acre site). The one County Park in the Subarea is South Lewis County Regional Park. Also in the rural area, South County Park is approximately 25 acres and is located just across the Cowlitz River from Toledo. The remaining parks in the South County Subarea are located in the three cities. (See Figure 6.2)

### **Toledo**

There is only one park inside the city limits of Toledo. Toledo City Park includes approximately nine acres with a picnic shelter, restrooms, playground and camping for recreational vehicles. The park is maintained by the City, though the City and the Toledo Lions Club usually split improvement costs, and often improvements are done by volunteers. The City opened a public boat launch into the Cowlitz River in early 2010. Other recreational areas in Toledo are located at the Toledo School Districts, the Toledo Little League Field, and the Girls Softball Association Field.

### **Vader**

There are three parks in the City of Vader. McMurphy Park is an approximately 12-acre park located at 607 Annonen Street. Park Street Park is about 3 acres in size. Werden Park contains less than one acre and is located at 510 A Street. Vader's Comprehensive Plan notes the importance of parks, but cites a lack of funding to improve adequately the existing City parks.

### **Winlock**

Winolequa City Park is the only park in the City of Winlock. Winolequa City Park is 36 acres in size and is located on North Rhodes Road. According to Winlock's Level of Service (LOS) standards, Winloqua meets the City's needs for a community park (4 acres per 1,000 people). The City does not have any neighborhood parks or developed trails. To meet the recreation demand for the projected 2025 population, Winlock needs 10.5 acres of neighborhood parks (LOS standard of 2 acres per 1,000 people) and 2.6 miles of trails (LOS 0.5 miles per 1,000 people). The City estimated that it would cost approximately \$1.8 million to meet the City's LOS standard of 6.5 total acres of parks per 1,000 residents.

## **Public Safety**

The Lewis County Sherriff's Office provides law enforcement for unincorporated Lewis County including the portions of the South County Subarea outside of the cities. The Lewis County Sheriff is organized into two groups, the Sheriff's Office and the Corrections Office (jail). The Sheriff's Office has 43 Deputy Officers, an administrative staff of 29, and an annual budget of \$7 million. The Corrections Office has 52 officers and an annual budget of \$6.5 million. The main Sherriff's office is in Chehalis, and there is a satellite office on Kirkland Road, south of Chehalis, and a substation in Packwood. The Sheriff's Office receives approximately 16,000 to 17,000 service calls per year. The Sheriff's Office does not have any expansion plans.

The Washington State Patrol has concurrent jurisdiction with the County and municipalities on all state routes in the Subarea, including I-5, US 12, SR 505, and SR 506. The Cities of Toledo, Vader, and Winlock operate their own Police Departments.

### **Toledo**

The City of Toledo Police Department is located at 130 N 2<sup>nd</sup> Street. The Police Department is staffed by a police chief, one paid officer, and two active reserve officers, and has a fleet of three patrol vehicles. The City contracts with Lewis County to provide jail, court, emergency management, and communication services.

### **Vader**

The Vader Police Department is located in City Hall at 317 8<sup>th</sup> Street. The Police Department is comprised of one police chief and three reserve officers. The Vader Police Department responds to between 550 and 600 calls per year. The Vader Comprehensive Plan identifies that the police headquarters needs improvement and to expand to accommodate an additional officer.

### **Winlock**

The Winlock Police Department, located at 323 NE First Street, has two fulltime police officers and three vehicles. The Winlock Police Department and Lewis County Sheriff's Department have mutual aid agreements for law enforcement support in the city limits and surrounding areas and for use of the Lewis County Jail. According to the City's LOS standard of one officer per 1,000 people, the City will need 4.6 officers by 2025. The cost of new officers, vehicles, and office space will result in a 20-year cost of over \$1.0 million.

## **Emergency Services**

Five fire districts serve the South County Subarea, Fire Districts 2, 5, 7, 8, and 15. Fire District 2 serves the Toledo area, Fire District 7 serves the Vader area, and Fire District 15 serves Winlock and the surrounding area. Fire District 5 serves Napavine and the northern portion of the Subarea. Fire District 8 serves the northeast corner of the Subarea. There are seven fire stations in the South County Subarea: three stations in Fire District 15, two stations in Fire District 2, and one station each in Fire Districts 5 and 7. There is an interlocal agreement among Fire Districts 2, 7, and 15 where the South County EMS provides emergency medical services for these three districts. There is also a contract between the cities and Lewis County for the provision of 911 services/dispatch and emergency management. (See Figure 6.3)

### **Fire District #2**

Fire District 2 provides fire protection and emergency medical services to 98 square mile of Lewis County with three stations. The District serves the eastern portion of the Subarea with two stations, one in Toledo and another on Tucker Road 5 miles northeast of Toledo. According to the City of Toledo Comprehensive Plan, Fire District 2 has 22 volunteer fire fighters, nine emergency medical technicians, and eight paramedics. The District has three fire engines, three tenders, two ambulances, two command units, and rescue/bush engine. In 1995, the Toledo Fire Station was renovated adding a new bay, office, and training room.

### **Fire District #5**

Serving 41 square miles in the Napavine area, including the northern portion of the Subarea, Fire District 5 has four fire stations. There is one fire station just north of the boundary of the Subarea, located on Jackson Highway north of US 12. Fire District 5 has 35 volunteer fire fighters, seven fire engines (five large and two small), and four pumper trucks.

### **Fire District #7**

Fire District 7 serves the 16 square miles in and around Vader in the southwest portion of the Subarea. The one fire station in the district is located in the Vader City Hall complex.

### **Fire District #8**

Serving the Salkum area, Fire District 8 provides fire protection for 108 acres with four fire stations, none of which are in the Subarea. Less than one square mile of the fire district is located in the Subarea. Fire District 8 has 30 volunteer firefighters and another 13 staff and volunteers.

### **Fire District #15**

Fire District 15 serves 55 square miles with a population of 3,500 citizens in the Winlock area in the western portion of the Subarea. The District has three fire stations, one in Winlock, in the east Winlock UGA and one 2 miles northwest of Winlock. According to the Winlock Capital Facilities Plan, Fire District 15 has a staff of 35 (including 20 volunteer firefighters) with a fleet of three pumpers, two pumper tenders, two ambulances, one brush truck, one rescue vehicle, and one support pick-up. The District responds to approximately 150 emergency service calls each year. The Plan identifies the needs of the Fire District by 2025, which includes 10 new vehicles, a new fire station, and new staffing at a cost of \$3.2 million.

## **Public Services Demand Forecast**

As the population and employment in South County Subarea grow, more public services will be required. This will require investments in things like more teachers, police officers, ambulance drivers, and equipment. Depending on the location and amount of growth, new or expanded facilities (such as a police station or a school building) may be required.

## **Capital Facilities Implementation**

Since the main focus of this plan is to establish the policy and regulatory basis for new economic development UGAs in South County, the demand for urban services will be driven by the nature and extent of the land uses to be accommodated in those UGAs. This demand will not be generated by residential development, but rather by commercial, industrial, and other business uses. Consequently, the provision of water, sewer, and roads will be a shared responsibility of the developers and the County. This will be determined in the binding site plan review and approval process where the mix of uses and their associated infrastructure requirements will be defined. This process will lead to development agreements establishing how, when, and by whom, improvements will be designed, constructed, and funded.

Implementation of municipal capital facilities will be in accordance with the individual Cities' policies and regulations. As the Cities' comprehensive plans are updated, their respective approaches to facility improvement timing and concurrency will be revisited. Interlocal agreements which establish the roles and responsibilities of the County and the Cities for development and infrastructure investment in the municipal UGAs will further provide direction for capital facilities implementation, depending largely upon how the regional utility program comes about.

## Implementation Phasing

There are several perspectives on the phasing of infrastructure development within the Subarea. These include: City Implementation; County Implementation; Regional Implementation and Private Implementation. These are not mutually exclusive. Since the planning horizon is 20 years, the identification of projects and financing becomes more speculative as the future view looks outward. For example, the Six-Year Capital Facilities Plan “will finance such capital facilities within projected funding and clearly identifies sources of public money for such purposes . . .”(WAC 365-196-415(1)(d)). In addition, “Counties and cities should forecast needs for capital facilities during the planning period . . .”(WAC 365-196-415(2)(b)(i)).

In this evolving perspective, the phasing of capital facilities to serve growth in South Lewis County must first address current needs; then short-term needs anticipated due to imminent development proposals; and then, longer-term needs that are expected to be driven by market forecasts. For the economic development UGAs, this phasing is complicated because the magnitude of the facility need and the related cost of the infrastructure depend on the type of development that is proposed. Since this future development will not include residential growth, the primary capital facility needs will be for water and sanitary sewer service. There will be internal roadway circulation, but that will be the responsibility of the users, or as part of public/private agreements. Later, improvements to the arterial system will be needed, and that will be addressed as outlined in the Transportation Element. Public services needs generated by the economic development are not anticipated in the near-term. Within this context, the anticipated phasing will involve:

### City Implementation

Each of the cities has an adopted capital facilities element that describes its approach to providing (and financing) improvements. While these plans are keyed to the allocated 20-year growth within the current UGAs, they also indicate some existing or planned capacity to serve growth outside of the current areas for some time. For example, the Winlock wastewater treatment plant has excess capacity. Provided that interlocal agreements can address use of this capacity in the short term with concomitant financing and revenue sharing, the County can entertain development permit proposals for an initial level of economic development.

### County Implementation

The County’s adopted capital facilities element does not include plans for providing urban levels of service particular to utilities in the proposed economic development UGAs. This is expected to come either through the regional approach described below or with coordinated service agreements between the County and Cities.

### Regional Implementation

A long-term solution to providing utilities to all of the urban areas in South Lewis County will emerge as the structure of the proposed regional utility organization is established and the drafting of a short term and long term capital facilities plan is prepared. This will produce a budget and finance plan including debt, user charges and fees, and grants and loans.

## Private Implementation

Technology has advanced to a point where wastewater treatment can occur on-site through the use of facilities such as Membrane Bio Reactor systems. These systems can create reclaimed water that can be reused for irrigation, toilets and other purposes associated with the land uses on the site. The ownership and operation of such a facility could be done in a variety of ways. If it is designed and installed by a single user, the ownership and operation could be private. If it is installed by a private party (i.e. the initial developer) and designed to serve a cluster of adjacent users in the future, the owner and operator could be the regional utility entity, or operation could be done by contract with another public agency.

## Recommended Strategies

The most important strategy for progress in achieving the Subarea Plan vision is the institution of the regional utility system. This will initiate coordinated planning, construction, and operation of water and sewer services throughout the Subarea serving growth in all urban areas.

The County and Cities should also initiate the process for securing additional water rights in accordance with the Department of Ecology's rule "Water Resources Management Program for the Cowlitz Basin, WRIA 26" (WAC 173-526). This requires preparation of an allocation scheme through a public process that considers existing water demand, available supply and local land use planning. This Subarea Plan should provide substantial information in support of the allocation scheme preparation.

The 2009 Comprehensive Economic Development Strategy (CEDS) prepared by the Cowlitz-Lewis Economic Development District includes a number of South Lewis County projects shown in the following table. Adoption of the Subarea Plan, and updates of the County and Cities' comprehensive plans, will affect most of these projects and add others. Implementation of the Subarea Plan will involve more specific project-level planning, cost analysis, and financial strategies. Since the CEDS is a gateway to federal economic development funding, it will be important for this list to be updated and refined in 2011. For the purposes of a Subarea six-year implementation plan, the Toledo and Winlock projects should be funded, subject to more refined scopes and cost estimates.

**Table 6.1: Six-Year Capital Improvement Projects 2009-2015**

Project	Completion Timeline	Cost	2010 Status
Toledo Wastewater Treatment Plant Upgrade	2009-2011	\$8,906,000	Pending
Toledo Water Tower & Water Rights	2008-2013	916,000	Pending
Toledo Area Water & Sewer Extension	2008-2010	2,640,000	Pending
Lewis County Regional Wastewater Treatment Plant	2011	10,000,000	Pending
South Lewis County Subarea Plan	2010	750,000	In Process
Ed Carlson Memorial Field Airport Master Plan Expansion	2010	100,000	In Process
Ed Carlson Memorial Field Airport Commercial/Industrial Expansion	2010	350,000	In Process
South Lewis County Transportation Plan	2009	650,000	Completed



Project	Completion Timeline	Cost	2010 Status
Winlock Water/Sewer Infrastructure to Industrial Park	2011	6,000,000	Pending

## Financing Strategies

Capital improvement project financing will depend on a mix of federal, state, local government, and private investment. This will include grants and loans as well as debt through levies and bond issues.

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Figure 6.1: South County Subarea School Districts

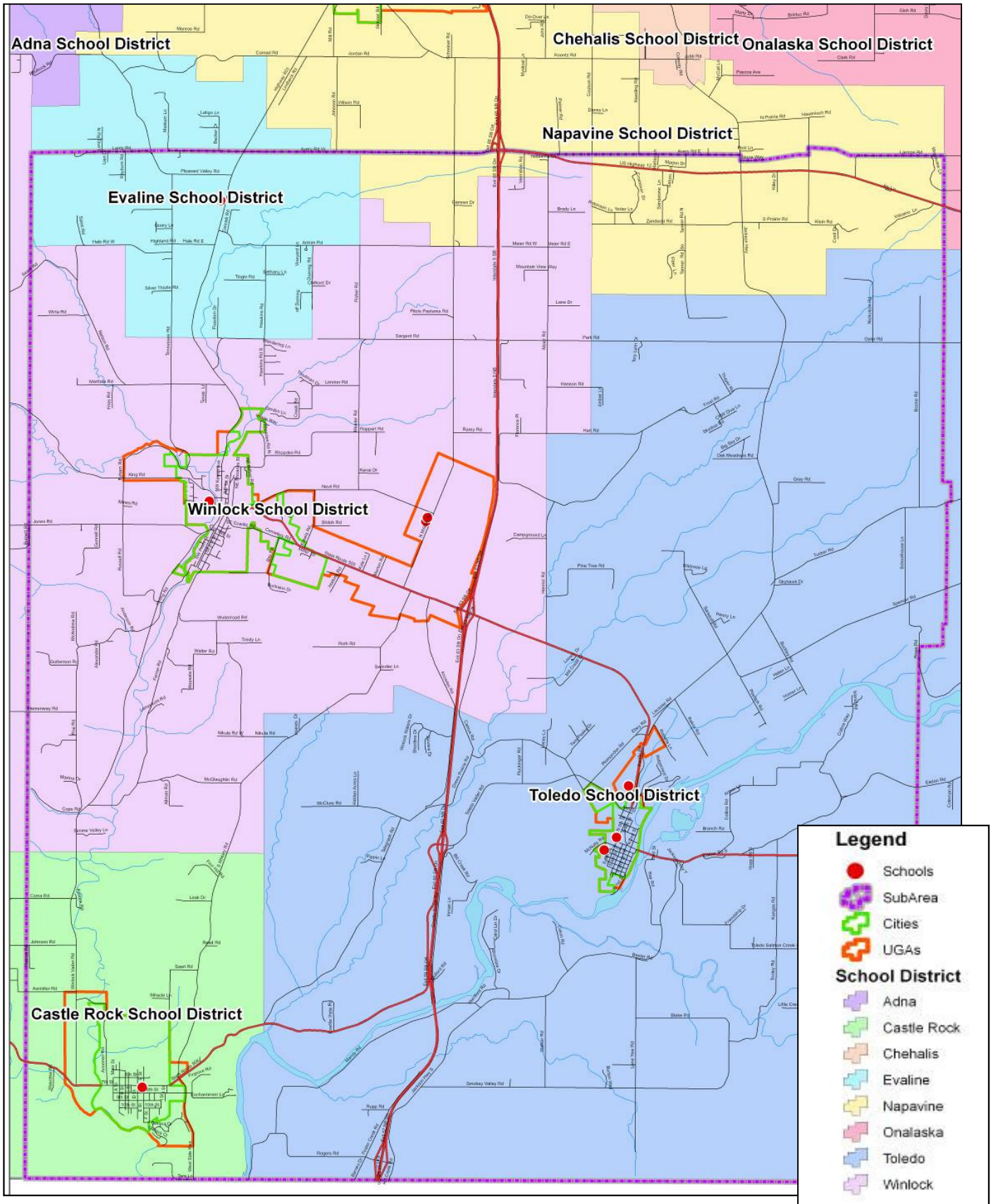


Figure 6.2: South County Subarea Parks and Recreation

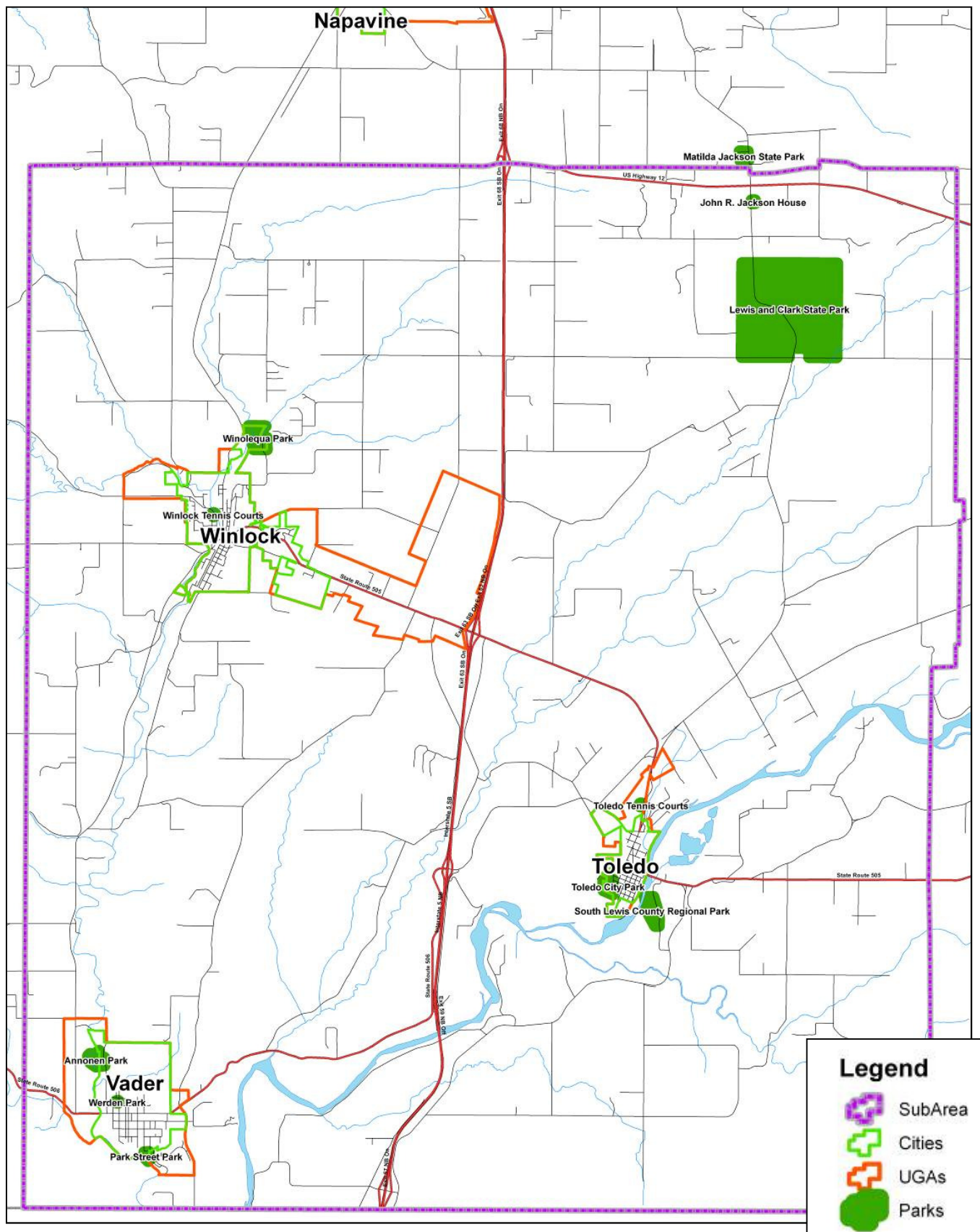




Figure 6.3: South County Subarea Fire Districts

